



# CHW ORAL HEALTH TRAINING PROGRAM

## Introduction to Oral Health

### SESSION 1

This training was funded by the Office of Oral Health, California Department of Public Health Contract 23-10605 and developed by the University of California, Los Angeles, School of Dentistry.

# ORAL HEALTH FOUNDATIONS

## What is Oral Health?

**Oral health** is the overall **health of our mouth**, including the teeth, gums, tongue, and lips. It allows us to eat, speak, and smile without pain or problems.



Good oral health is more than just having healthy teeth—it also helps us to feel confident and stay healthy overall.

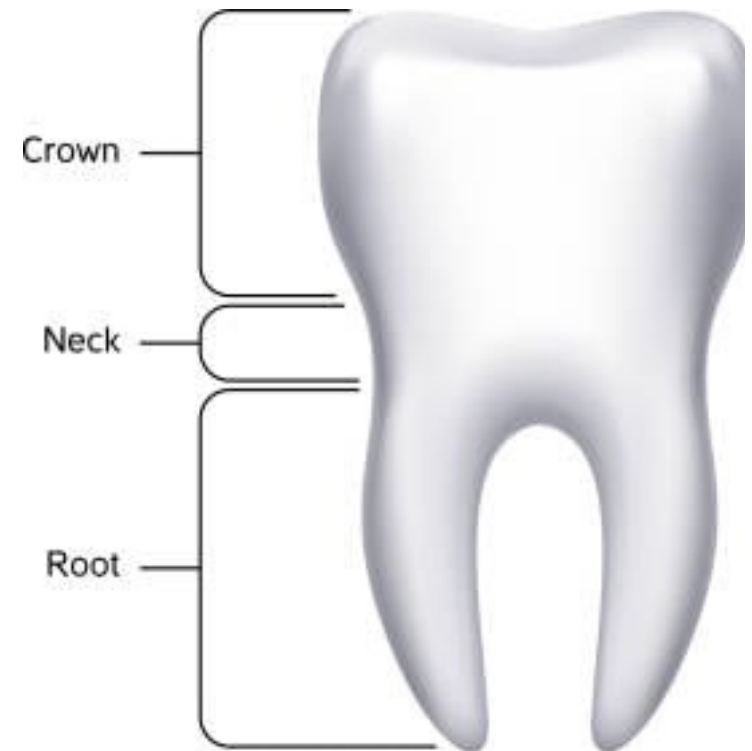
## Why is it important?

Oral health is essential for overall well-being. Healthy teeth and gums allow people to eat nutritious foods, speak clearly, and smile with confidence. **Good oral health prevents pain, infections, and tooth loss**, and it also helps reduce the risk of other health problems such as heart disease, diabetes, and complications during pregnancy.

# WHAT DOES A TOOTH LOOK LIKE?

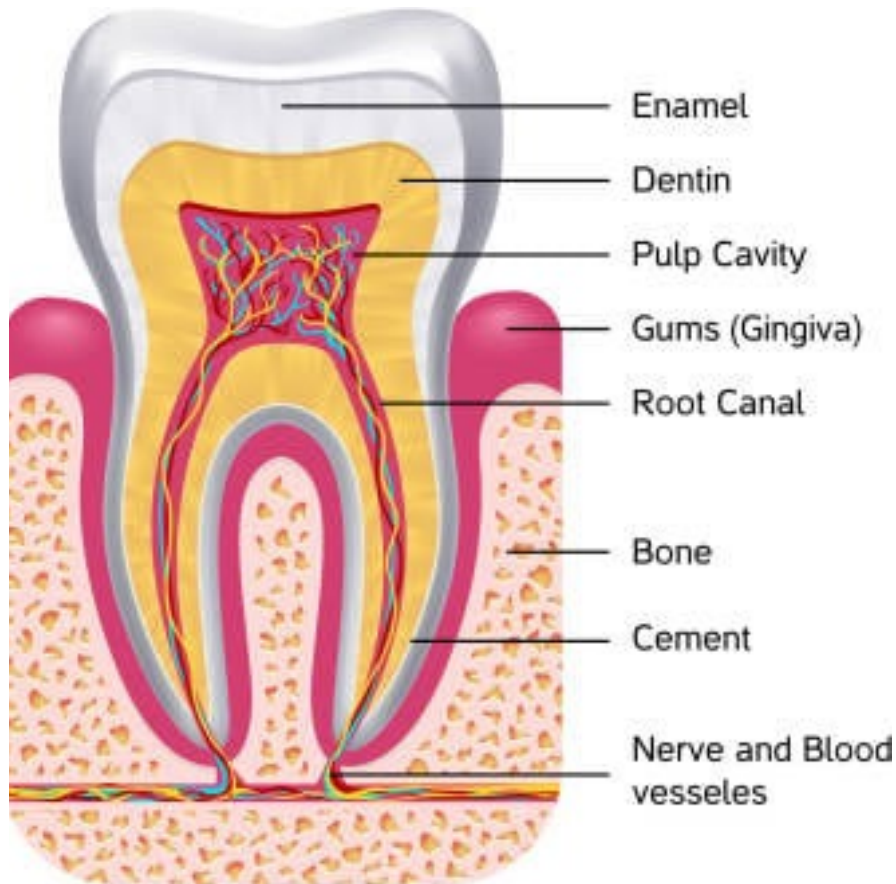
A tooth has **three main parts**:

- **Crown** – The visible part of the tooth above the gum line. It's covered with **enamel**, the hard, protective outer layer that helps with biting and chewing.
- **Neck** – The area where the crown meets the root, right at the gum line. It's a small connecting region.
- **Root** – The part of the tooth below the gum line that anchors it to the jawbone.



## TOOTH ANATOMY

# WHAT DOES A TOOTH LOOK LIKE?

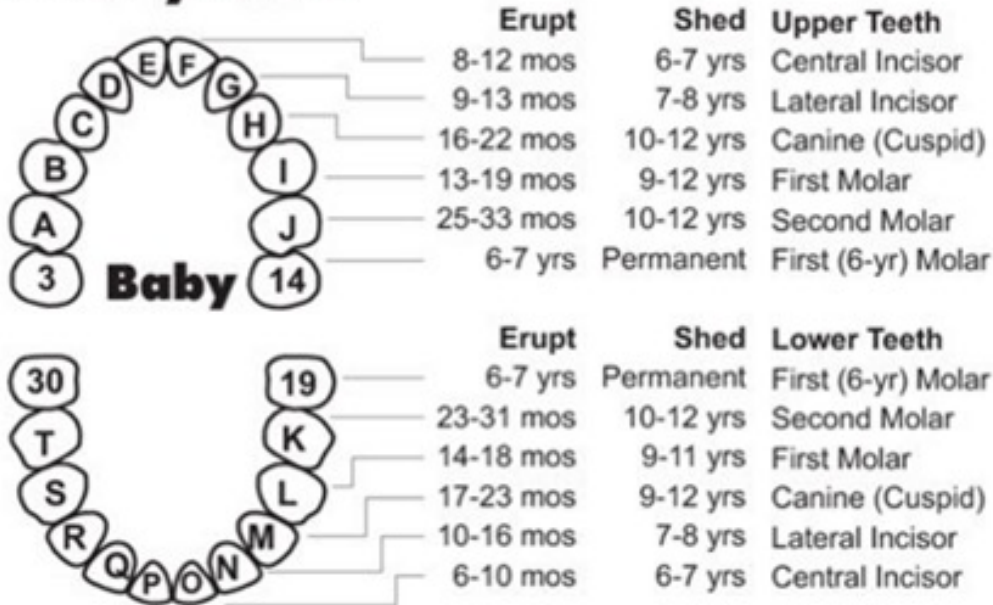


## Layers of a tooth:

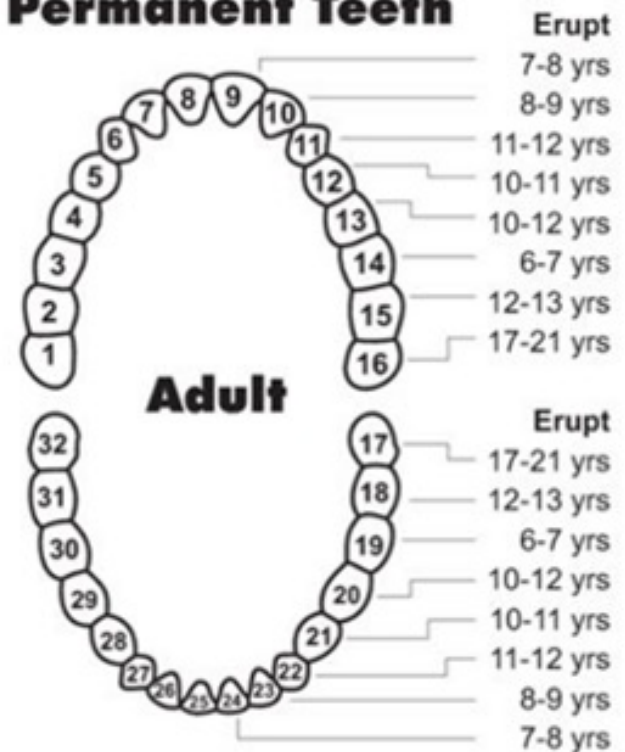
- **Enamel** – Hard outer layer protecting the tooth.
- **Dentin** – Layer under the enamel; softer and carries some nerve signals.
- **Pulp** – Center of the tooth with nerves and blood vessels that keep the tooth alive and sensitive.

# PRIMARY VS. PERMANENT TEETH

## Primary Teeth \*



## Permanent Teeth \*



\*Primary/Baby teeth are assigned letters

\*Permanent/Adult teeth are assigned numbers

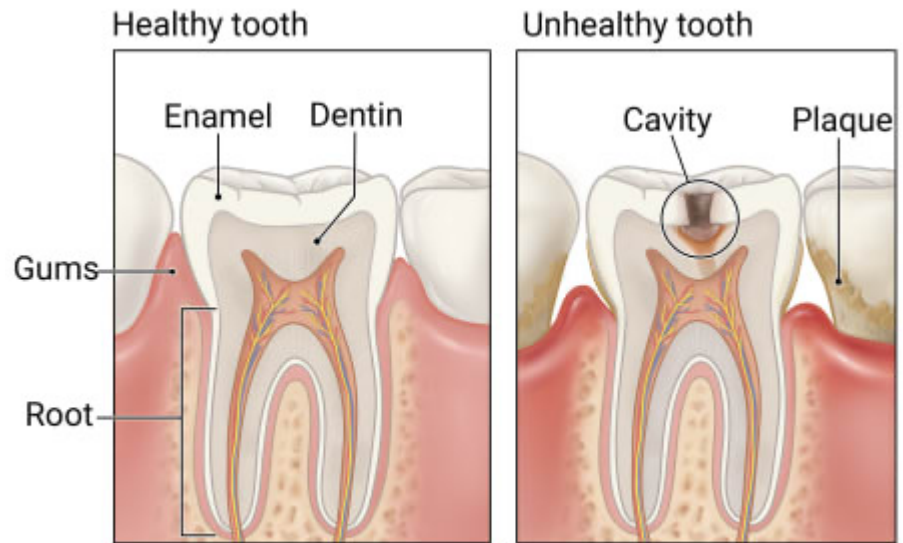
# HEALTHY VS. UNHEALTHY TEETH

## Healthy Tooth:

- Smooth, white or light-colored
- No cracks or holes
- Firm, pink gums
- No pain or sensitivity

## Unhealthy Tooth:

- White spots lesions
- Dark spots, holes, or cavities
- Cracks or chips
- Yellow, brown, or stained (due to plaque and/or tartar)
- Red, swollen, or bleeding gums
- Pain or sensitivity
- Bad breath that won't go away



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# WHAT CAUSES DENTAL CAVITIES?

**Dental cavities** (tooth decay) are caused by **bacteria in the mouth**.

These bacteria feed on **sugary and starchy foods** and produce **acid**, which slowly **breaks down the tooth's enamel**.

If not cleaned away by brushing and flossing, this can lead to **holes in the teeth**, called cavities.



# WHAT CAUSES DENTAL CAVITIES?

**Plaque** is a soft, sticky film made up of bacteria, saliva, and food particles.

- Plaque can be removed by brushing, flossing, and mouthwash.
- Left untreated, it can lead to gum disease, cavities, and bad breath.

**Tartar**, or **calculus**, is hardened plaque and deposits from the calcium and minerals contained in our saliva. It is yellow or brown and accumulates along the gumline or between teeth.

- Over time, these minerals form deposits on the teeth.
- Even the best brushers and flossers develop these deposits. Once formed, only a dentist can remove them.
- Visiting the dentist regularly is important!



*Plaque irritating the gums*



*Tartar*



+



+



# SIGNS OF DENTAL CAVITIES

Signs of cavities include:

- Loss of enamel that exposes dentin
- Pain or sensitivity to temperatures and sweet or sour foods and drinks

When the cavity forms, it appears darker than the tooth.

- Yellow or brown: lost enamel
- Black: Usually bad. You may or may not have pain.

Cavities progress more quickly in children than in adults and can affect adult teeth as they form.

**10 months old**

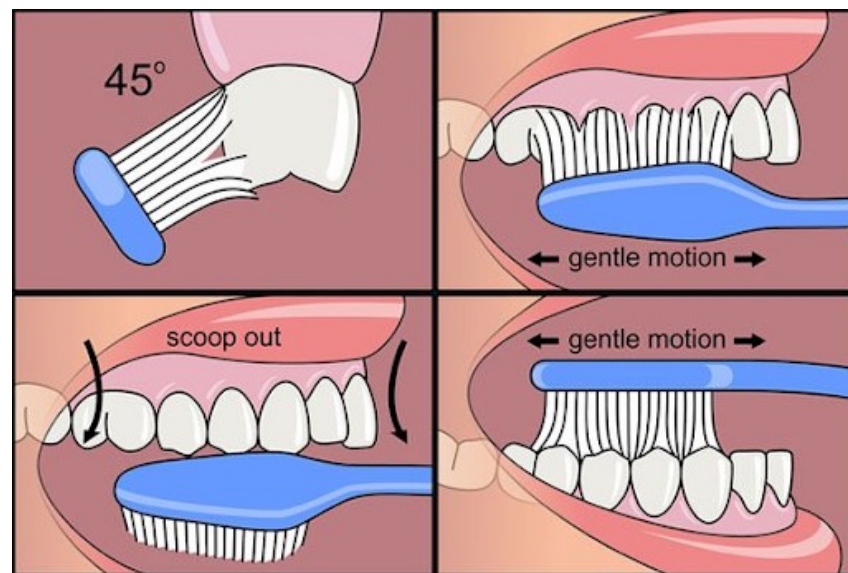


**18 months old**



# HOW TO BRUSH TEETH

- **Use a soft-bristled toothbrush** with fluoride toothpaste.
- **Hold the brush at a 45-degree angle** to your gums.
- **Brush gently in small circular motions** on all tooth surfaces—front, back, and chewing surfaces.
- **Brush for about two (2) minutes**, twice a day.
- **Don't forget your gums and tongue** to remove bacteria and freshen breath.



# WHEN TO REPLACE A TOOTHBRUSH

- Replace your toothbrush when it starts to fray! This is typically every three (3) to four (4) months.
- If you notice that the bristles are not effective, it is time to replace your toothbrush, and it may be a sign you brush too hard.
- Good quality dental products are available at many discount stores.
- Read the labels and make sure you get a brush with soft bristles!



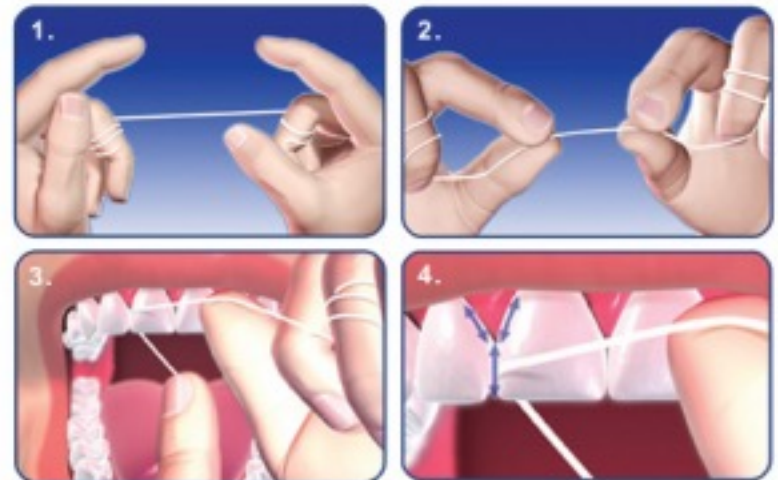
# FLOSSING

**Flossing** is important because it removes bacteria from the areas between our teeth that aren't visible.

- Flossers can help make flossing easy.
- Kids should begin flossing when their teeth touch each other!
- Parents should help their kids floss.

## How to floss:

1. Go between the teeth with floss
2. Make a C-shape
3. Scoop up and down the side of each tooth
4. Repeat around each tooth, top and bottom.



# MOUTHWASH

Mouthwash can reduce plaque, strengthen teeth, and freshen breath.

When selecting a mouthwash...

- **Avoid** ones with **alcohol** as an ingredient
- Choose one with **fluoride**



**Inactive ingredients** water, sorbitol, poloxamer 407, propylene glycol, menthol, methyl salicylate, sodium phosphate, disodium phosphate, potassium sorbate, polysorbate 20, sodium saccharin, flavor, cetylpyridinium chloride, calcium disodium EDTA, sodium benzoate, green 3, yellow 5 (309-039)

## Drug Facts

Active ingredient	Purpose
Sodium fluoride 0.05% (0.02% w/v fluoride ion) ....	Anticavity

# XYLITOL CAN FIGHT DENTAL DECAY



- Bacteria cannot digest Xylitol and cannot produce the acid that causes tooth decay. Xylitol “starves” the bacteria.
- Xylitol is SAFE to use during pregnancy.
- However, Xylitol is more expensive than some other sugar-free sweeteners (i.e., sorbitol, mannitol).



# TAP WATER IS BEST!

**Fluoride** in tap water **prevents dental decay.**

- Most tap water sources have fluoride.
- Boiling water does not remove the fluoride.
- What about water filters?
  - “Reverse Osmosis” filters removes fluoride.
  - Other filters do not remove fluoride.





# ORGANIC FOODS AND SUGAR CONTENT

Organic sweets, drinks, and snacks can have **just as much sugar** as regular versions. Common sources include organic cane sugar, honey, and fruit juice concentrate. The body processes these the same way as regular sugar.

The “**organic**” label **doesn’t mean healthier**; sugar still impacts weight, blood sugar, and dental health the same way.

**Tip:** Always check Nutrition Facts and ingredient lists, not just the organic seal.

Examples:

- Organic juice (8 oz): 20–30g sugar
- Organic granola bar: 10–15g sugar
- Organic yogurt with fruit: 15–25g sugar



# NUTRITION REMINDERS FOR YOUR PATIENTS



## **LIMIT sweets/carbohydrates, like:**

- Candy
- Cookies and cake
- Pastries
- Dried fruits
- Sugary drinks (soda, fruit-flavored drinks, fruit juice)

## **If you do eat/drink sweet things:**

- Have them at mealtimes
- Rinse with water after

# SOME IMPORTANT WORDS THAT MEAN *SUGAR*

Other words that can mean sugar include:

- Fructose
- Sucrose
- Cane sugar (evaporated or not)
- Concentrated fruit juice (ex. grape)
- Corn syrup
- High fructose corn syrup



Sugar: Hiding in plain sight (TedED) <https://youtu.be/Q4CZ81EmAsw>  
What Does Sugar Actually Do To Your Body? <https://youtu.be/utXcl3FqzeM>

# SNACKING

Limit snacks to ***two (2) to three (3) times per day.***

## ***Healthy snacks:***

- ✓ Tap water
- ✓ Fresh fruits
- ✓ Nuts (after three (3) years of age)
- ✓ Low fat cheese
- ✓ Fresh vegetables
- ✓ Yogurt (check for sugar!)

## ***Cavity-causing snacks:***

- Cookies
- Crackers
- Bakery goods
- Fruit juice
- Soda
- Gatorade, Powerade
- Fruit snacks
- Dried fruit (ex. Raisins)



# ORAL HEALTH & GENERAL HEALTH

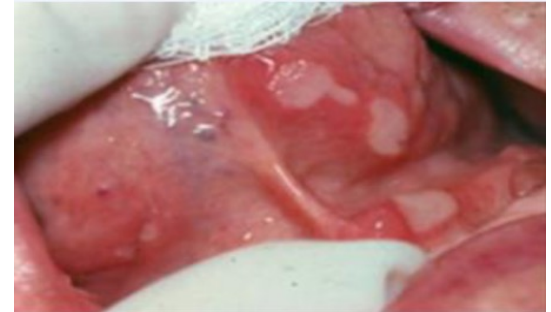
- Oral health is essential to general health and quality of life.
- Dentists can screen for systemic diseases.
- This image shows some of the general health problems associated with poor dental health.



# DENTAL EXAMS - BEYOND THE TEETH

## DENTISTS CAN CHECK FOR:

- **Diabetes**
- **Infectious diseases**
  - HIV, HPV
- **Medication effects**
  - Gingival overgrowth
  - Dental erosion
  - Osteonecrosis
  - Dental decay (dry mouth, sugar preparations)
  - Yeast infections (e.g., candida)
- **Dental erosion**
  - Stomach acid coming up
  - Highly acidic drinks
- **Dry mouth**
- **Jaw issues**
- **Oral cancer**



# ORAL DISEASES: *TOOTH LOSS*



## Negative impacts of having **no teeth**

- Difficulty eating
- Inadequate nutritional intake
- Dissatisfaction with facial appearance



## Treatment: Dentures

- Provide support
- Make eating easier
- Improve facial appearance
- But come with their own problems.  
Visiting the dentist is still important!



# ORAL DISEASES:

## *GINGIVITIS*

**Gingivitis:** Inflammation of the gum that has not yet progressed to bone destruction

**Factors that contribute to gingivitis:**

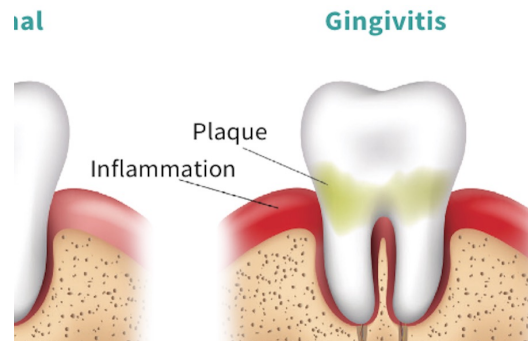
- Plaque
- Changes in hormone levels (pregnancy, puberty, diabetes)
- Placing foreign bodies in the mouth (for example: children ingesting small pieces of food, such as popcorn kernels and nut pieces, or wood splinters caused by pencils)

**Symptoms include:**

- Tenderness
- Mild gum swelling
- Bleeding gums
- Bad breath

**Treatment for gingivitis:**

- Good oral hygiene
- Regular dental visits



# ORAL DISEASES: *PERIODONTAL DISEASE*

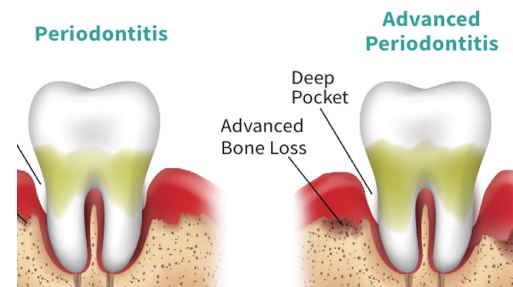
Periodontal disease is caused by chronic plaque and tartar (calculus) build up. This causes chronic inflammation that leads to destruction and loss of supporting bone, which in turn leads to tooth mobility and eventual tooth loss.

## **Periodontal disease is made worse by:**

- Smoking
- Diabetes
- Pregnancy
- Dry mouth
- Not visiting the dentist regularly

## **Treatment for periodontal disease:**

- Good oral hygiene and increased dental visits (every three [3] months)
- Deep cleanings
- Chlorohexidine rinse (prescribed by the dentist)
- Antibiotics (if needed)



# ORAL DISEASES: *ROOT CAVITIES*

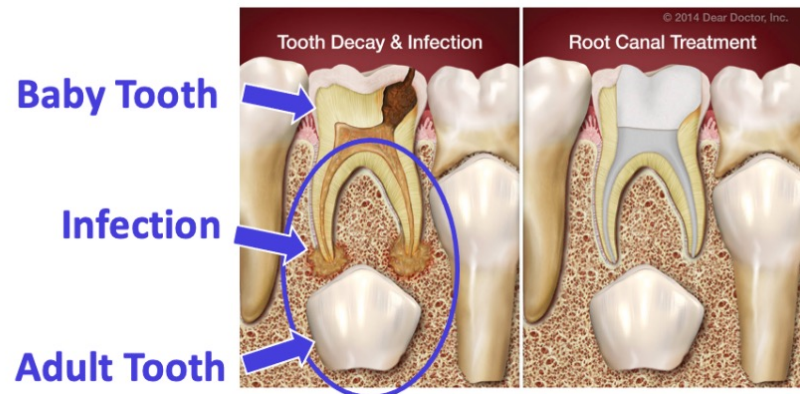
## Root cavities:

- Exposed root caused by gingival recession or periodontal disease
- Roots are more susceptible to decay compared to the crowns, cavities develop easily
- Root cavities are more common in adults



# DENTAL TREATMENT: *TREATING CAVITIES*

- **Small cavities** can sometimes be fixed ***without*** a local anesthesia injection.
- Once a cavity forms, it will only get larger.
- As the **cavity gets larger**, local anesthesia is usually needed to fix it.
- Depending on the extent of the cavity and, for primary teeth, how close the infection is to the developing adult tooth, it may require:
  - Filling
  - Crown
  - Root canal
  - Extraction



# DENTAL TREATMENT: *SILVER DIAMINE FLUORIDE (SDF)*

**Applied by a dental professional**

**What does SDF do?**

- Stops (“arrests”) cavities from progressing
- Turns cavities black and hard - stops cavity
- Delays or avoids surgical removal for cavity
- May require multiple applications

**When to use SDF:**

- For high-risk patients with active cavities
- For young children or those with special needs
- If multiple cavities cannot be treated in one (1) visit

**Don't use SDF** if the patient already has tooth pain or has a silver allergy.



Active cavitated caries lesions before application of SDF



SDF-treated lesions with temporary gingival staining

# DENTAL TREATMENT: *FILLINGS & CROWNS*

## "White" & "Silver" Fillings

- After a cavity is removed, the missing tooth is replaced with a material
- Filling types include amalgam (silver) or resin composite (white)

## Crowns

- If there is not enough tooth left after the cavity is removed, a crown may be needed
- Crown types: Silver, resin composite "strip," or Zirconia



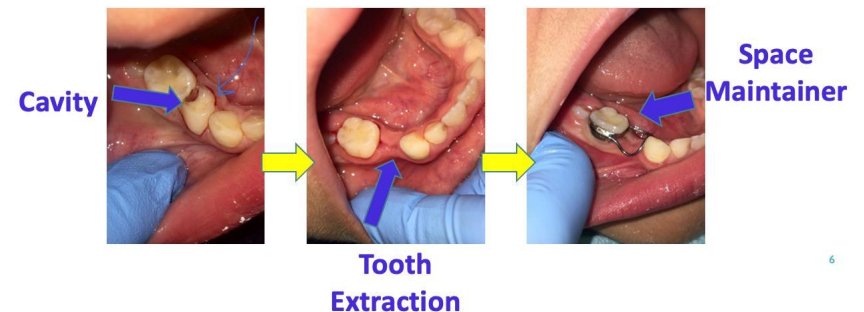
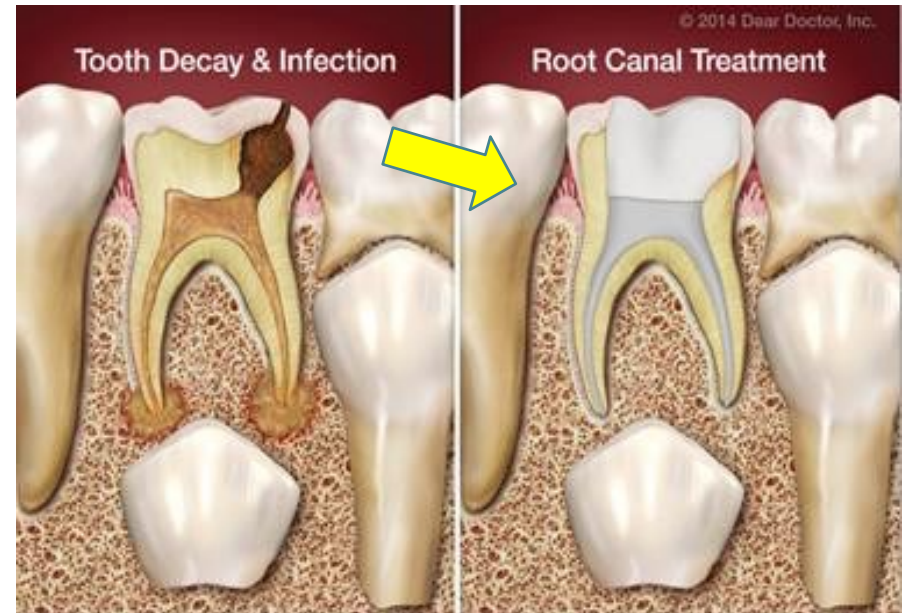
# DENTAL TREATMENT: *ROOT CANALS & EXTRACTIONS*

## "Baby Root Canal"

- If decay is in the pulp, pulp must be cleaned out
- Usually a crown is needed after

## Extractions

- Needed if the infection is into the bone or not enough tooth remains after decay is removed



# ORAL DISEASES ARE PREVENTABLE

**Remember, oral diseases can be prevented by:**

- Brushing twice a day
- Using a soft toothbrush and fluoridated toothpaste
- Focusing on areas where the teeth and gums meet
- Flossing daily
- Avoiding frequent snacking
- Avoiding alcohol & tobacco
- Visiting the dentist every six (6) months (or more if needed)



# RESOURCES

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# RESOURCES

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7. California Department of Health Care Services. (n.d.). *Denti-Cal*. <https://www.dhcs.ca.gov/services/Pages/Denti-Cal.aspx>
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